

**INSTRUCTION**  
**for 6th year students of medical faculty**  
**Infectious Diseases:**

**PLAN**

Name of the section (topic)	Number of class hours
	practical
1. General infection syndrome. Fever of unknown origin. Sepsis, septic shock. Infections associated with the provision of medical care. Diseases that occur with lymphadenopathy . HIV infection	7
2. Infectious diseases of the respiratory system: acute catarrhal syndrome, acute respiratory viral infections, acute pneumonia, tonsillitis syndrome. Acute respiratory failure	7
3. Infectious diseases that occur with damage to the hepatobiliary system and the gastrointestinal tract: acute and chronic viral hepatitis, acute liver damage of bacterial and parasitic etiology, infectious diarrhea. Abdominal revival and hypovolemic shock	7
4. Infectious diseases of the central nervous system: meningitis, encephalitis, myelitis , with indroma of edema-swelling of the brain, neurotoxic syndrome in infectious diseases . Acute adrenal insufficiency	7
5. Quarantine and especially dangerous infections. T ropicheskie disease	7
<b>Total hours</b>	<b>35</b>

**CONTENT OF EDUCATIONAL MATERIAL**

**1. General infection syndrome. Fever of unknown origin. Sepsis, septic shock. Infections associated with the provision of medical care. Diseases that occur with lymphadenopathy . HIV infection**

The main clinical symptoms that make up the general infectious syndrome. A ichor order of unknown origin: n richiny and the algorithm is a diagnostic search for

fever of unknown origin, etc. differential diagnostics with various kinds of hyperthermia.

Antipyretic measures .

Sepsis: etiology, pathogenesis, classification, pathogens with an unexplained primary focus. selection antibacterial drugs for initial empiric antibiotic therapy of sepsis. Shock -diagnostics, pathogenetic drugs , emergency medical assistance .

This is the biological structure of infections associated with the provision of medical care, classification, laboratory diagnostic methods. The principles of etiologic and pathogenetic therapy.

And infectious diseases occurring with lymphadenopathy : the main pathogens, differential diagnosis with diseases of non-infectious etiology.

HIV infection : a modern epidemiological characteristics . Diseases associated with HIV infection. The importance of the complex of epidemiological, clinical and laboratory data for the early diagnosis of HIV infection . Antiretroviral treatment: general principles, regimens and main classes of antiretroviral drugs, effects . HIV prevention methods : postexposure prevention, prevention of vertical transmission of HIV infection .

**2. Differential diagnosis of diseases occurring with respiratory syndrome and with oropharyngeal involvement. Infectious diseases that occur with respiratory syndrome: influenza, parainfluenza, adenovirus infection, etc. ARVI . Infectious diseases occurring with oropharyngeal lesions: angina, diphtheria, infectious mononucleosis, scarlet fever, herpangina, tularemia.**

The clinical symptoms that make up the catarrhal syndrome. The main pathogens of acute respiratory viral infections (ARI). Influenza: clinical presentation , diagnosis, differential diagnosis , treatment of uncomplicated and complicated forms of influenza, indications for hospitalization. Flu vaccination.

Other acute respiratory viral infections : parainfluenza, adenovirus infection , respiratory syncytial , rhinovirus infection. (clinical picture , diagnosis, treatment). Indications for hospitalization. Complications of ARVI . Indications for antibiotic therapy. Sanitary and anti-epidemic measures in the outbreak of acute respiratory viral infections.

Complications of ARVI. Indications for antibiotic therapy. Community-acquired pneumonia : etiological structure depending on age and premorbid background, principles for choosing antibacterial drugs. Indications for hospitalization.

Tonsillitis syndrome: diagnosis, spectrum of the main pathogens. The principles of choosing antibacterial drugs. Differential diagnosis of diphtheria and tonsillitis of another etiology. Specific prophylaxis of diphtheria. Sanitary and anti-epidemic measures in the outbreak of diphtheria.

Types of acute respiratory failure, pathogenesis, clinical manifestations, diagnosis, emergency medical care.

**3. Infectious diseases that occur with damage to the hepatobiliary system and the gastrointestinal tract: acute and chronic viral hepatitis, acute liver damage**

## **of bacterial and parasitic etiology, infectious diarrhea. Dehydration. Hypovolemic shock**

Hepatitis syndrome: the main clinical symptoms. Laboratory and clinical criteria for impaired liver function . Enteral and parenteral of viral hepatitis : clinical, diagnostics. Interpretation of molecular biological and immunological blood tests . Differential diagnosis with acute liver damage of bacterial and parasitic etiology. Indications for hospitalization. Treatment and prevention of acute viral hepatitis. Sanitary and anti-epidemic measures in the outbreak of acute viral hepatitis.

Modern classification of chronic hepatitis. Chronic viral hepatitis : extrahepatic manifestations. Determination of indications, contraindications, optimal regimens for the appointment of antiviral drugs .

Complications of viral hepatitis: acute liver failure, hepatorenal syndrome: diagnosis, severity assessment , emergency medical care . Liver cirrhosis, hepatocellular carcinoma : clinical, diagnosis, differential diagnosis. Indications for liver transplantation.

The main pathogenetic mechanisms of diarrhea. Differential diagnosis of infectious and non-infectious diarrhea. Invasive diarrhea : the main pathogens, etiological and epidemiological features, clinical manifestations, diagnostic methods. Indications for the administration of etiotropic therapy , in the selection of antibacterial and antiprotozoal drugs .

Osmotic diarrhea : the main pathogens, etiological and epidemiological features, clinical manifestations, diagnostic methods, doctor's tactics, treatment, prevention.

Secretory diarrhea : the main pathogens, etiological and epidemiological features, pathogenesis, clinical manifestations, diagnostic methods.

Indications for hospitalization for infectious diarrhea. Sanitary and anti-epidemic measures in the focus of the disease of acute intestinal infection.

Clinical and laboratory criteria for the degree of dehydration. The principles of rehydration therapy. Hypovolemic shock, emergency medical care .

## **4 . Infectious diseases of the central nervous system. Syndrome of meningitis (meningoencephalitis) and infectious-toxic encephalopathy. Purulent, serous meningitis, diagnosis, tactics of the doctor. Meningococcal infection, diagnosis, differential diagnosis, tactics of the doctor at the prehospital stage. Emergency care for infectious-toxic encephalopathy**

The etiological structure of infectious lesions of the central nervous system ( CNS ) . Syndromic diagnosis of various levels of central nervous system lesions , clinical symptoms. differential diagnosis of infectious and non-infectious lesions of the central nervous system .

Serous meningitis : the main pathogens, early diagnosis, doctor's tactics , treatment, indications for the administration of etiotropic therapy. Etiologic features, epidemiology, pathogenesis, clinical, diagnosis and treatment of primary and secondary purulent meningitis ( meningoencephalitis ), selecting causal therapy, prophylaxis.

Meningococcal infection : modern epidemiological features , clinical classification, early diagnosis, differential diagnosis with infectious lesions of the central nervous system and exanthema of other etiology, diagnostic and treatment tactics. Acute adrenal insufficiency, emergency medical care.

Types of cerebral edema. Clinical manifestations of edema-swelling of the brain . Emergency medical care .

Neurotoxicosis : causes and pathogenetic mechanisms of the development of toxic brain damage. Emergency therapeutic measures.

### **5. Quarantine and especially dangerous infections. Zoonotic infections**

The spread of quarantine and especially dangerous infections. Features of etiology, epidemiology, clinical manifestations of especially dangerous infections of bacterial (plague, cholera, anthrax) and viral (especially dangerous hemorrhagic fevers: yellow , Marburg, Ebola) etiology. Therapeutic tactics for suspected quarantine infection.

Features of etiology, epidemiology, clinical manifestations of the most common zoonotic infectious diseases (leptospirosis, brucellosis, hemorrhagic fever with renal syndrome , tularemia, yersiniosis). Opportunities for laboratory diagnostics and. Profilaktika, sanitary and anti-epidemic measures in the foci e zoonotic infections. The choice of medical tactics.

## INFORMATION AND METHODOLOGICAL PART

### LITERATURE

#### MAIN LITERATURE

1. Infectious diseases: a textbook for medical students. universities / E.P. Shuvalova [et al.] - 8th ed. reslave . and add. - SPb. : SpetsLit , 2016. - 782, [1] p., 4 col . on: tab. - Rec. M tion of Health.
2. Infectious diseases and epidemiology: a textbook for students of medical. universities / V.I. Pokrovsky, S.G. Pak, N.I. Briko , B.K. Danilkin. - 3rd ed. Ispra . and add. - Moscow: GEOTAR-Media, 2016 .-- 1007 p., 8 col . incl. : ill., tab. - Rec. UMO for honey . and a pharmacist. the formation of Russian universities.
3. Kozorez, E. I. AIDS - indicator diseases: textbook.-method. allowance for students of 5-6 courses of the Faculty of Medicine and FPSZS, 5th year of the Medical Diagnostic Faculty of Higher Medical Education / E. I. Kozorez. - Gomel: State Medical University , 2018 .-- 92 p. - Rec. UMO UO " GomGMU ".
4. Mandell, Douglas, and Bennett`s principles and practice of infectious diseases. [In 2 vol.] Vol. 1 / [ed. by] JE Bennett, R. Dolin, MJ Blaser. - 8th ed. - [Philadelphia ]: Elsevier, Saunders, 2015. - xxxvii, 1680, 1120 p. : ill., col. phot., tab. + Expert consult online .
5. Harrison's infectious diseases / ed. DL Kasper, AS Fauci . - 3rd ed. - New York [et al. ]: McGraw-Hill Education, 2017. - xix, 1307 p. : col. ill., tab., phot.

#### ADDITIONAL LITERATURE

1. Anishchenko, E. V. Acute respiratory diseases: clinic, diagnosis, treatment, prevention: textbook. Method. manual for students of 4-6 courses of medi . Fak. and fact. by sub . specialists for abroad . countries, 4 and 5 courses of medical diagnostician. Fak. honey. universities and infectious disease doctors / E. V. Anischenko, E. L. Krasavtsev; UO " GomGMU ", Department. infectious diseases. - Gomel: GomGMU , 2015 .-- 43 p. : tab.
2. Human viral diseases / Yu. V. Lobzin [et al.]. - St. Petersburg: SpetsLit , 2015. - 398 p., [1] p. : ill., tab., ph.
3. Viral diseases [Electronic resource ]: textbook / ed. N. D. Yushchuk . - M.: GEOTAR-Media, 2016 .-- 640 p. - Access mode: <http://www.studmedlib.ru/book/ISBN9785970435847.html> . - Date of access: 04.04.2019.
4. Viral hepatitis: clinic, diagnosis, treatment [Electronic resource] / N. D. Yushchuk [et al.] - 2nd ed., Revised . and add. - M.: GEOTAR-Media, 2015 .-- 304 p. (Series "Library of a medical specialist" ) .-- Access mode: <http://www.rosmedlib.ru/book/ISBN9785970435410.html> . - Date of access: 04.04.2019.

5. HIV infection and AIDS. Clinical recommendations [Electronic resource] / ed. V.V. Pokrovsky. - 3rd ed., Revised . and add. - M.: GEOTAR-Media, 2016 .-- 112 p. - Access mode: <http://www.rosmedlib.ru/book/ISBN9785970439005.html>. - Date of access: 04.04.2019.

6. Demchilo , A.P. Differential diagnosis of diarrhea syndrome and differentiated treatment of acute intestinal infections: textbook.-method. allowance for students 4 - 6 courses of medi . Fak. and fact. by sub . specialist. for abroad . countries, 4 and 5 courses of medical diagnostician. Fak. honey. universities / A.P. Demchilo , O. L. Tumash , E. L. Krasavtsev; UO " GomGMU ", Department. infectious diseases. - Gomel: GomGMU , 2015 .-- 33 p. : tab.

7. Demchilo , A.P. Meningococcal infection: textbook.-method. manual for 4-6 year students of all faculties of institutions of higher medical education / A.P. Demchilo , E.I. Kozorez, I.A. Razuvanova . - Gomel: GomGMU , 2019 .-- 30s .

8. Infectious diseases: syndromic diagnosis [Electronic resource] / ed. N.D. Yushchuk , E.A. Klimova - M.: GEOTAR-Media, 2017 .-- 176 p. - ISBN 978-5-9704-4045-2 - Access mode: <http://www.rosmedlib.ru/book/ISBN9785970440452.html> . - Date of access: 04.04.2019.

9. Infectious Diseases [Electronic Resource ]: National Guide / Ed. N.D. Yushchuk , Yu.Ya. Vengerova. - M.: GEOTAR-Media, 2015 .-- 1056 p. (Series "National Guides"). - Access mode: <http://www.rosmedlib.ru/book/ISBN9785970432655.html> . - Date of access: 04.04.2019.

10. Kozorez, E.I. Fungal infections in HIV- infected people: textbook. Method. manual for students of 4-6 courses of medi . Fak. and fact. training specialists for zarub. countries, 4-5 courses of medical diagnostic fac. honey. universities / E.I. Kozorez, I.A. Razuvanova . - Gomel: GomGMU , 2016 .-- 35s.

11. Tumash , O. L. Differential diagnosis of fevers: textbook.-method. manual for students of 4-6 courses of medi . Fak. and fact. by sub . specialists for abroad . countries, 4 and 5 courses of medical diagnostician. Fak. honey. universities and infectious disease doctors / O. L. Tumash , E. I. Romanova; UO " GomGMU ", Department. infectious diseases. - Gomel: GomGMU , 2015 .-- 46 p. : ill., tab.

12. Tsyrcunov , V. M. Infectious diseases [Electronic resource]: a manual for training . in the magistracy in the specialty "Infectious diseases" / V. M. Tsyrcunov , Yu. V. Kravchuk; UO " State State Medical University ", Department. infectious diseases. - Grodno: State State Medical University , 2016. - Electron. text . Dan. (volume 20.4 MB). - 1 electron. opt. disk (CD-ROM).

13. Yushchuk N.D., Lectures on Infectious Diseases. Volume 1. [Electronic resource] / N.D. Yushchuk , Yu.Ya. Vengerov - M.: GEOTAR-Media, 2016 .-- 656 p. - ISBN 978-5-9704-3699-8 - Access mode: <http://www.rosmedlib.ru/book/ISBN9785970436998.html> . - Date of access: 04.04.2019 .

14. Oxford specialist handbook of infectious disease epidemiology / ed. by I. Abubakar [et al.]. - Oxford: Oxford University Press, [2016]. - xx, 379 p. : ill., scheme, tab.

## ELECTRONIC DATABASES

1. Doctor's consultant. Digital Medical Library = Consultant of the doctor . Electronic medical library [Electronic resource] / Publishing group "GEOTAR-Media", LLC "IPUZ". - Access mode: <http://www.rosmedlib.ru/> . - Date of access: 04.04.2019.

2. Student advisor. Digital library of a medical university = Student consultant . Electronic library of medical high school [Electronic resource] / Publishing group "GEOTAR-Media", LLC "IPUZ". - Access mode: <http://www.studmedlib.ru> . - Date of access: 04.04.2019.

3. Scientific electronic library eLIBRARY.RU = Scientific electronic library eLIBRARY.RU [Electronic resource]. - Access mode: <https://elibrary.ru/> . - Date of access: 04.04.2019.

4. Oxford Medicine Online [Electronic resource] / Oxford University Press. - Access mode: [www.oxfordmedicine.com](http://www.oxfordmedicine.com) . - Date of access: 04.04.2019 .

5. Springer Link [Electronic resource] / Springer International Publishing AG. - Access mode: <https://link.springer.com> . - Date of access: 04.04.2019 .

## LIST OF PRACTICAL SKILLS

1. Medical history (including epidemiological), physical examination of a patient with an infectious disease .
2. Determination of the main meningeal symptoms in a patient .
3. Inspection of the patient's discharge with an assessment of pathological changes.
4. Interpretation of the results of a general clinical study of blood and urine.
5. Interpretation of the results of a biochemical blood test of a patient with an infectious disease.
6. Interpretation of coprogram results .
7. Interpretation of the results of molecular genetic studies of blood in viral hepatitis.
8. Interpretation of the results of an immunological blood test on markers of parenteral viral hepatitis.
9. Interpretation of the results of a general clinical study of cerebrospinal fluid.

10. Drawing up a plan of diagnostic measures for a patient with fever of unknown origin.
11. The method of taking biological material for bacteriological culture.
12. Interpretation of the results of bacteriological inoculation of biological material.
13. Making a rehydration therapy plan .
14. Providing medical care in emergency conditions that complicate the course of infectious diseases.